Core Vocabularies
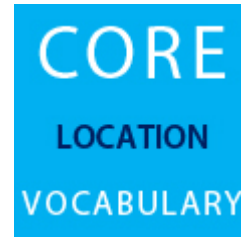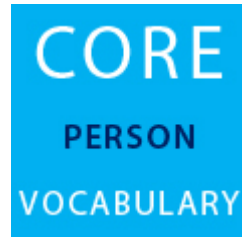
Online webinar #3
6th of October 2021

ISA²

Objective of the webinar

Present propositions for the open GitHub issues w.r.t

Core Person and **Core Location**

Agenda

1. Welcome
2. Context of the revision process of the Core Vocabularies
3. Proposed changes to the Core Vocabularies
   - General changes
   - Core Person
   - Core Location
4. Wrap-up: actions and timeline

Webinar practicalities

🔊 Click on « connect audio » but please mute your microphones

💬 You can also share your questions for the Q&A session via the chat*

📷 The webinar will be recorded

*One question after each speaker + Q&A discussion

2. Context of the revision process of the Core Vocabularies

Speaker: Pavlina Fragkou

SEMIC solutions

Specifications
- **Core Person**
- **Core Business**
- **Core Location**
- **Core Public Organisation**
- Core Criterion and Core Evidence
- Core Public Service Vocabulary (Application Profile)
- DCAT-AP
- GeoDCAT-AP (DCAT-AP extension)
- StatDCAT-AP (DCAT-AP extension)
- ADMS

Context of the Core Vocabularies

The Core Vocabularies are a set of semantic assets that aim at capturing the fundamental characteristics of data entities to ensure a minimum level of harmonisation across domains.

CORE PERSON VOCABULARY

A person's name(s), date and place of birth/death, identifier, addresses, citizenship, etc.

CORE BUSINESS VOCABULARY

The legal name, address, identifier, company type, and activities of a legal entity.

describe

CORE LOCATION VOCABULARY

The different ways of describing a location, e.g. via an address, a geographic name, or a geometry, in alignment with INSPIRE.
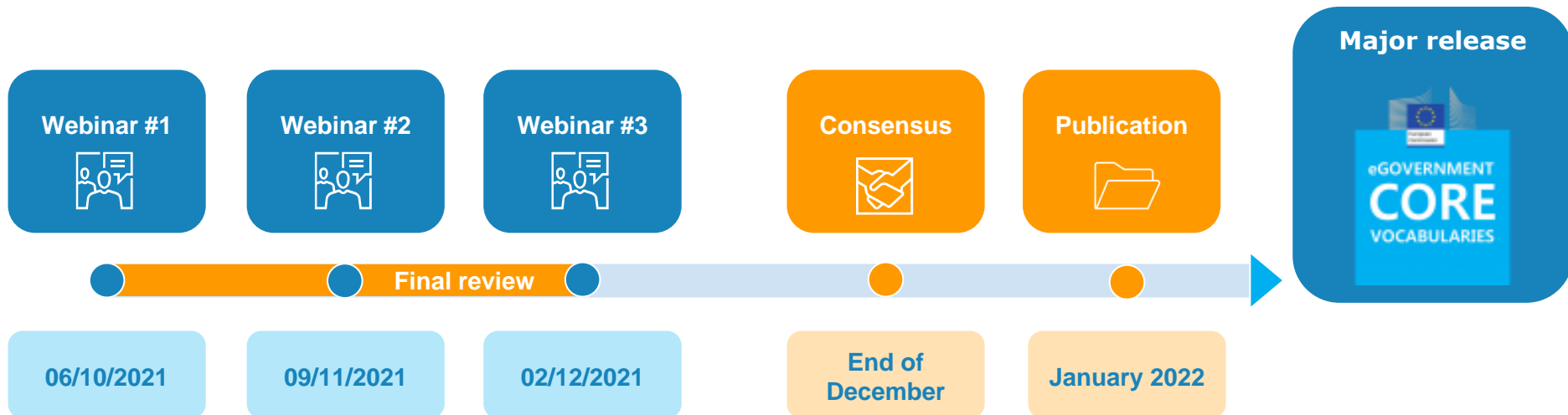
CORE PUBLIC ORGANISATION VOCABULARY

The administrative information, hierarchy, identifiers, events and classification of a public organisation.

Context of the Core Vocabularies

- The initial version (v1.0) of the Core Vocabularies was published in 2013. The Core Public Organisation Vocabulary was added to this list in 2016, together with the Core Public Service Vocabulary.

- Therefore, the revision process in view of a major release (v2.0) of the Core Vocabularies has been initiated by a public review in order to list the points of improvement and changes to be made.

- The objective of this webinar is to introduce the proposed new version (v2.0) of the Core Vocabularies based on your contribution, in order to discuss it and acknowledge it officially.

Revision process of the Core Vocabularies

The review process of the Core Vocabularies consists of 3 webinars scheduled one month apart, allowing us to work in iteration and discuss the 4 different Core Vocabularies in the most optimal way possible.

Webinar #1	Webinar #2	Webinar #3	Consensus	Publication	Major release
06/10/2021	09/11/2021	02/12/2021	End of December	January 2022	

Final review

45 issues

40+ changes proposed

Objective of the Core Vocabularies

The e-Government Core Vocabularies are

- **simplified**,
- **re-usable**, and
- **extensible**

*data models that capture the **fundamental** characteristics of a data entity in a context-neutral and syntax-neutral fashion.*

Objective of the Core Vocabularies

The e-Government Core Vocabularies are

- ***simplified**,*
- ***re-usable**, and*
- ***extensible***

*data models that capture the **fundamental** characteristics of a data entity in a context-neutral and syntax-neutral fashion.*

→ Keeping things simple conflicts with supporting complex use cases (such as which a number of issues are proposing)

→ (Potential) future work: create extensions of the Core Vocabularies based on an agreed set of more complex use cases

4. Proposed changes to the Core Vocabularies

Speaker: Dimitri Schepers

4.1 General changes

Expected action when the following logo appears

Let's discuss this idea

Let's agree / disagree

Representing the vocabulary in UML/HTML (Issue #20)

We are currently working on an improved and consistent template for the specifications of the Core Vocabularies (and other SEMIC assets).

The suggestions that were raised in the issue are all valid improvements and will be taken into consideration when creating this new template.

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Terminology and definitions in the core vocabularies (Issue #21)

The editors have:

1. created (syntax) rules for writing definitions of the Core Vocabularies (Github link) – **Feedback is welcome!**
2. reviewed the existing definitions w.r.t. to these rules and adapted them where needed – the supporting spreadsheet will be shared.

Limit the impact on the semantic interoperability by:

- **Apply strictly** the set of rules agreed to any **new class or property**.

- Only **apply** these rules to **existing terms** if this can be done **without changing the meaning**.

- Pay special attention to definitions that are today subject to several interpretations (e.g. the weighting type in CCCEV) and must be improved to increase the reusability.

European Commission

Data modelling rules

- R1 - Be concise but complete

  Ex: The name or names of a unit of administration where a Member State has and/or exercises jurisdictional rights, for local, regional and national governance. Level 1 refers to the uppermost administrative unit for the address, almost always a country.

- R2 - Describe only one concept

- Structure definitions in a standardized way

  R3 - Use singular

  R4 - No negative definition

  R5 - Abbreviations

  R6 - Similarity

  R7 - Graphics

- R8 - International standards

  Ex: Globally unique identifier for each instance of an address (from W3C's locn:addressID)

- R9 - No circular definitions

  Ex: An individual person who may be dead or alive, but not imaginary

  VS. human being, dead or alive but not imaginary

- R10 - Secondary and extra information
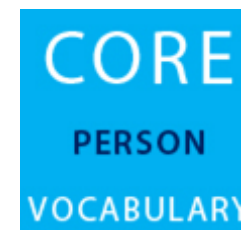
4.2 Detailed overview of the changes for Core Person
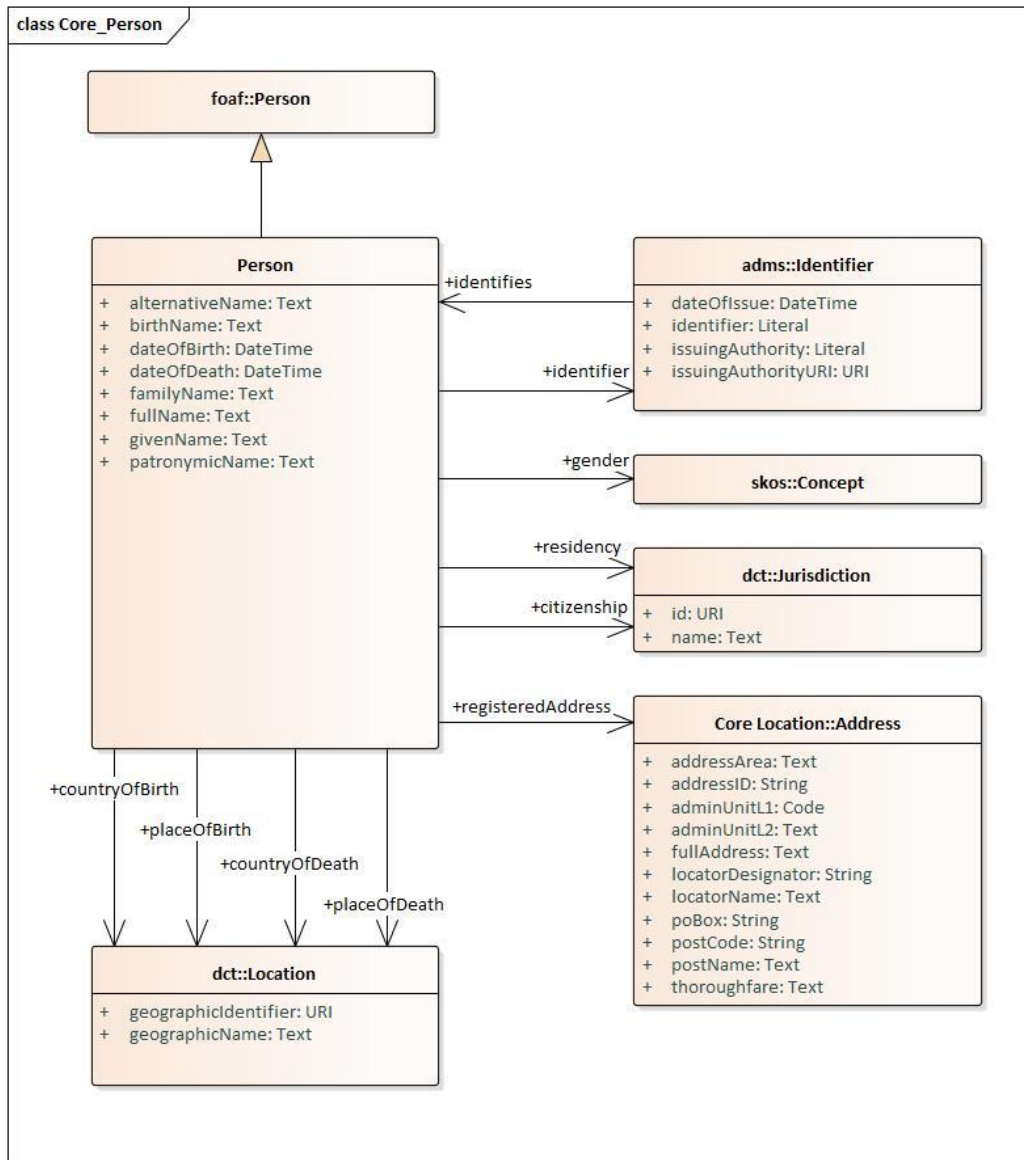
Expected action when the following logo appears

Let's discuss this idea

Let's agree / disagree

CORE
PERSON
VOCABULARY

Core Person Vocabulary V2.0

Need to conflate CPV, CPOV and CBV into a CAGV (Issue #5 and #6)

Agent is a broader concept than only Persons or Organisations; e.g. software, robots, etc. are also Agents.

The specific Core Vocabularies serve their specific use cases.

Proposition: We want to clarify the relationships among the Core classes (Person, Public Organisation and Legal Entity) and their relationship with the Agent class

(1) via creating an overview diagram of the Core Vocs and
(2) by adding placeholders in the respective Core Vocs.

(In the next webinar, we'll look more into detail in the overlap between Core Business and Core Public Organisation.)

Do you agree with this proposition?

European Commission

Harmonisation of Core Vocs

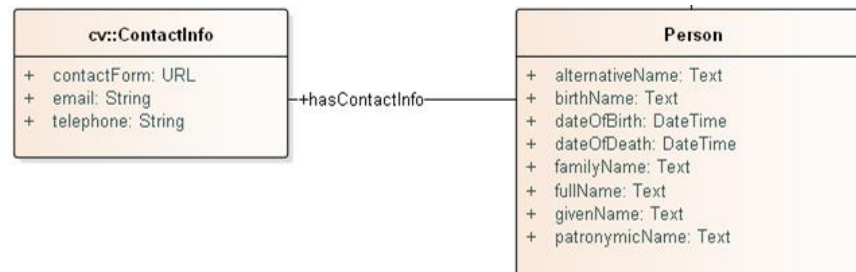We are working on a consolidated diagram of all ISA² assets.
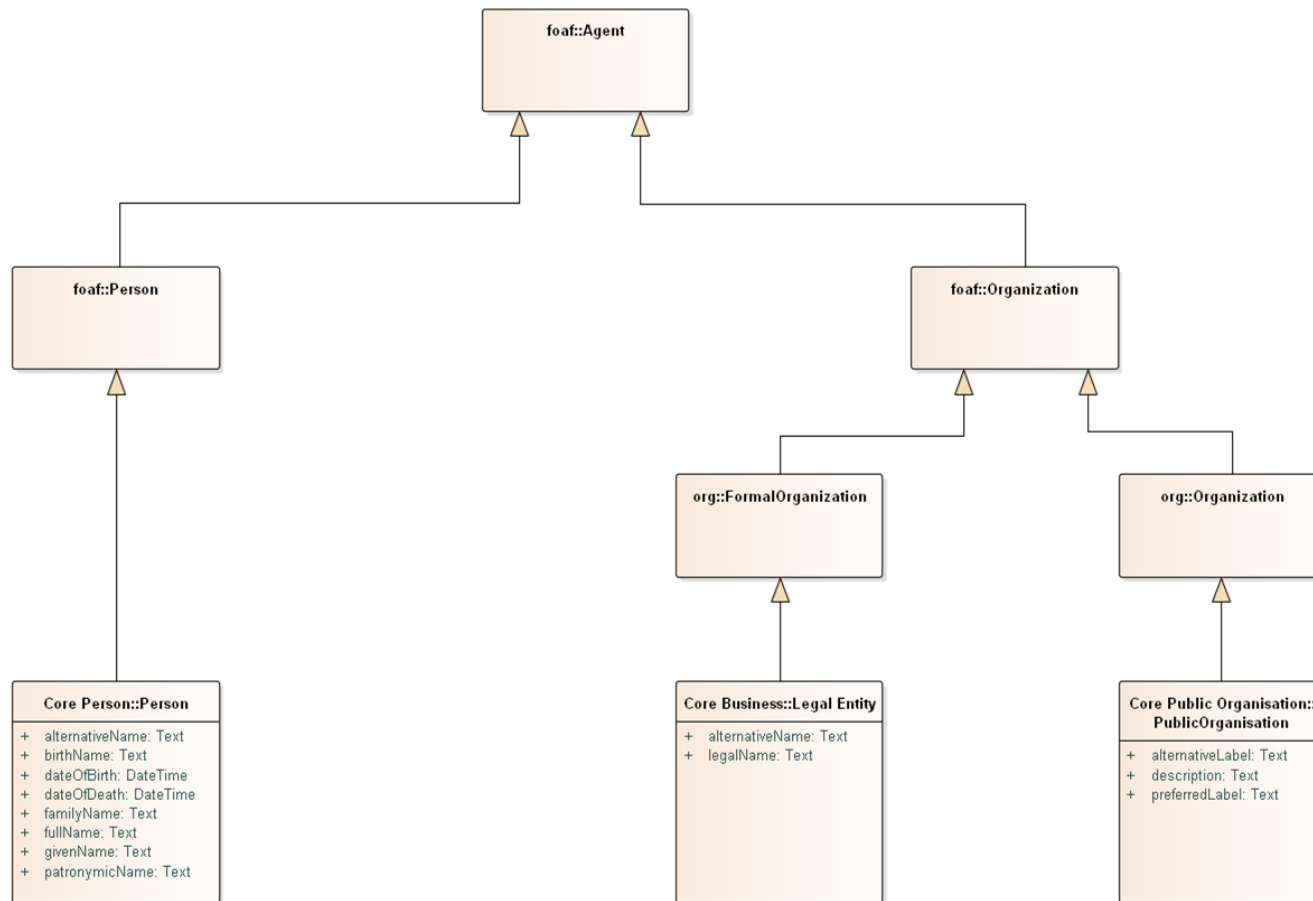
Revise Agent and potentially add contact details (Issue #5).

As Agents can also be e.g. software programs, contact details are not always relevant, but rather will depend on the specific class.

Proposition:

We propose to add contact details as a generic concept with some properties to the different Core Vocabularies.

cv::ContactInfo		Person
+ contactForm: URL + email: String + telephone: String	—+hasContactInfo—	+ alternativeName: Text + birthName: Text + dateOfBirth: DateTime + dateOfDeath: DateTime + familyName: Text + fullName: Text + givenName: Text + patronymicName: Text

Do you agree with this proposition?

Adaption of the gender for intersex and/or transgender people (Issue #7)

Concept definition for gender (Issue #13)

A special working group has been created in the Corporate Reference Data Management coordination group to investigate "Gender and Human Sex" related reference data.

The goal is to investigate if existing concepts can be harmonized as well as definitions on a corporate level (e.g. F/M/female/male/Ms/Mr/Miss) and how new concepts can be introduced like e.g. 'inter-sex, "non-binary", "third sex", "Mx" in a uniform way in the EC IT systems, UI, forms, and webpages.

The plan is to reach a conclusion by the end of the year and then create new code lists or update the existing ones according to the decision.

Proposition:

To await their conclusion and to adopt their recommendation.

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BirthDate as xsd:Date is insufficient; incomplete birth dates do exist. (Issue #17)

Proposition:

We recommend to use EDTF (ISO 8601-2:2019) for unknown or partially known dates.

Note that validation possibilities will decrease as xsd:Date (validation) is not compatible with EDTF.

Do you agree with this proposition?

European Commission

Core Change Vocabulary ([Issue #10](#))

Change as a concept is the result of Events.

Personal Events: Birth, Death, Marriage, etc.

Organisational Events: Foundation, Fusion etc.

Changes modeled as Events are often included in semantic models
History however is often left out-of-scope as it is more implementation-specific and because it often collides with semantics.

Nevertheless, a vocabulary that unambiguously defines terminology concerning History would be useful e.g. for implementations.

See also [Linked Data Event Streams](#) as a technical solution.

Proposition:

We propose to consider the Core Change Vocabulary as future work.

We invite the community to provide us with their use cases
for a potential Core Change Vocabulary.

Remove dependence on schema.org ([Issue #30](#))

Properties used within Core Person from schema.org:

- schema#gender   →
    person#gender
- schema#birthDate   →
    person#birthDate
- schema#deathDate   →
    person#deathDate

Proposition:

To create equivalent URIs within the SEMIC namespace.

Clarification of the Jurisdiction class (issue #15)

Clarification of Administrative Unit (issue #17)

Proposition:

Jurisdiction: *Limits or territory within which authority may be exercised.*

Administrative Unit: *Unit of administration where a Member State has and/or exercises jurisdictional rights, for local, regional and national governance.* (Source: INSPIRE)
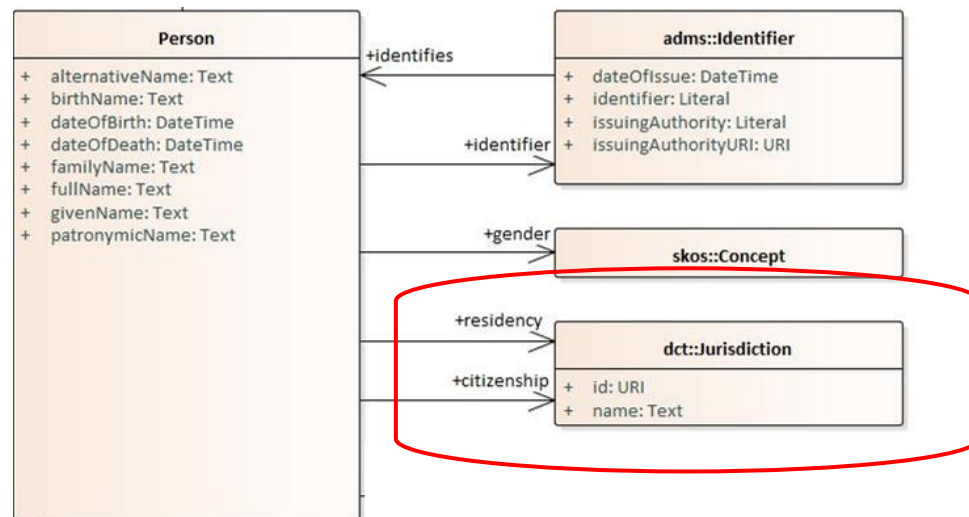
To suggest the use of the administrative unit code lists (ATU and LAU) of the OP for the values of the *id* and *name* properties in Jurisdiction.

Do you agree with this proposition?

Add a way to express that a givenName or a familyName does not exist ([Issue #19](#))

The Core Vocabularies do not enforce cardinalities.

How to handle partial (or non-existing) names is application-specific and out of scope of a Core Vocabulary.

Proposition:

No change.

Addition of a Name class ([Issue #23](#))

The Core Vocabularies do not propose a mechanism to deal with temporal aspects. For example, if a country allows a person to change his given name, the Core Vocabularies do not include a mechanism to record the given name of a person at a specific point in time. This is left to the context-specific data models to specify.

Proposition:

Modelling historical data for persons, e.g. changes in names, gender, citizenship etc. over time, is currently out of scope and may be considered for future work.

We invite the community to provide us with their use cases.

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Add matronymic name (**Issue #25**)

Definition: *Name based on the given name of the Person's mother.*

- Does this exist within EU? Is there a use case?
- Do we need these kind of properties? Other variants such as teknonymic might then also be valid additions.
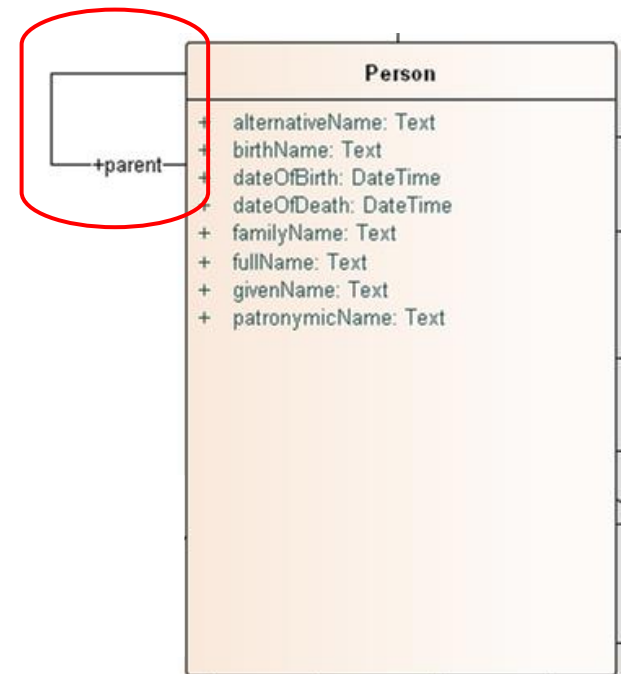
Addition of Parents' names: Parent 1 and Parent 2 (Issue #22)

Proposition:

- Add relationship {Person parent Person}
- Definition: *Person who is the father or mother of the Person.*

Do you agree with this proposition?

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Character set (syntactic interoperability) (**Issue #26**)

Proposition:

We recommend to use UTF-8.

Further syntactical standardisation is out-of-scope for the Core Vocabularies as it will be application- or context-specific.

LangString can be used to indicate both the language and script used, e.g.

- "Aθήνα"@gr-Grek (the Greek endonym written in the Greek script)
- "Athína"@gr-Latn (the standard Romanisation of the endonym)
- "Athens"@en (the English language exonym)

Do you agree with this proposition?

European
Commission

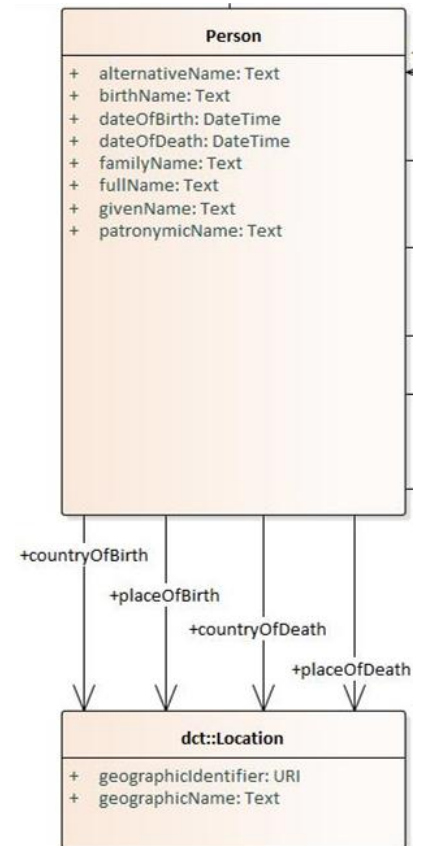## Birth and Death as (life) events (Issue #27)

Proposition:

To not remove the simple case that we currently have

To keep the alignment with eIDAS

Life events tackle different use cases than those currently covered by Core Person → future work

- Do you agree with this proposition?
- We invite the community to share their use cases w.r.t. Birth and Death as events.

Definition of date of birth/death (Issue #28)

Proposition:

- New definition: "Date on which the Person was born / died."

  (In line with the rules of ISO 11179)

Do you agree with this proposition?

Role / Participation ([Issue #31](#))

Proposition:

We propose to use the Participation class as currently used within CPSV-AP.

(This class is also part of the overview diagram, indicating its relation to the other Core Vocabularies via the Agent Class.)

- Do you agree with this proposition?
- We invite the community to share use cases, where the Participation class might be insufficient.

Role / Participation ([Issue #31](#))

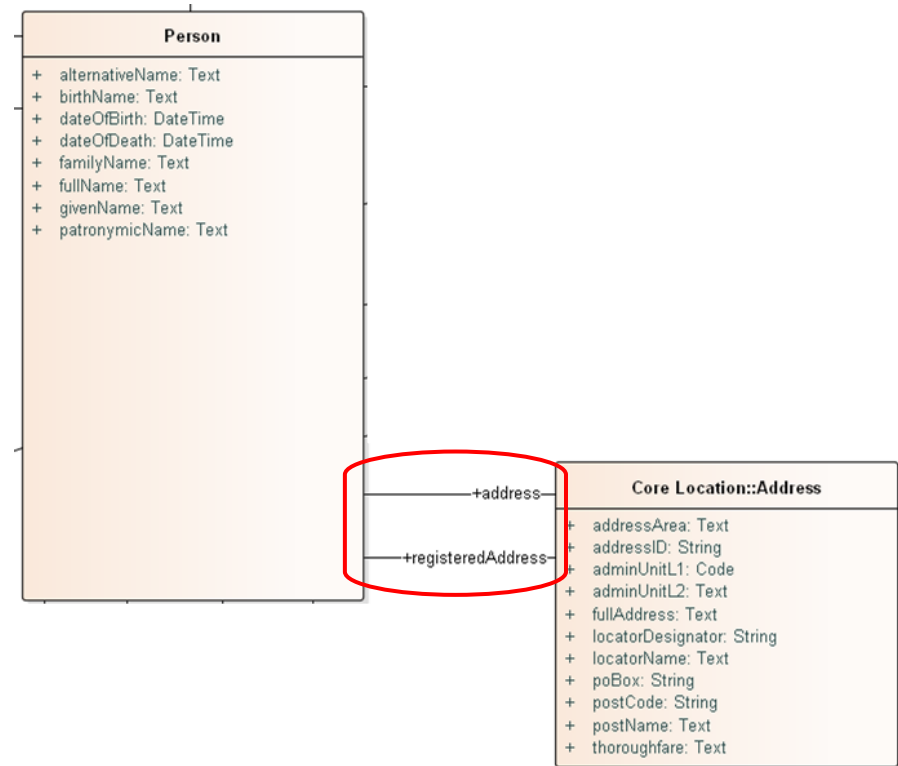
Partial view of the overview diagram
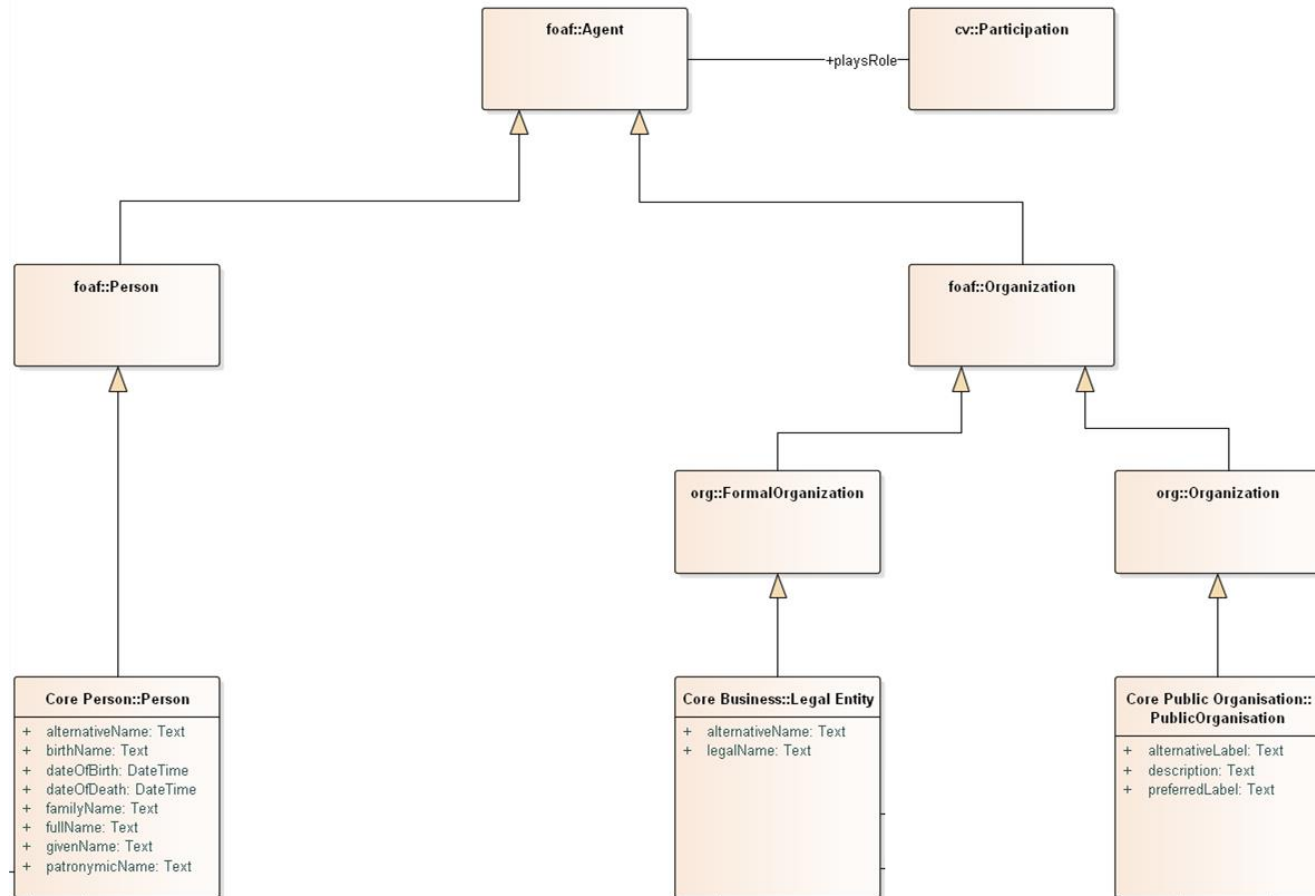
Add secondary/temporary address ([Issue #32](#))

Proposition:

- To keep the *address* property as a generic superproperty that can be specialized depending on specific needs.

- To only include the *registeredAddress* subproperty in the Core Vocabularies. Other specific subproperties can be part of an application profile.

Do you agree with this proposition?

eIDAS alignment

Conclusion:

- V2.0 of Core Person does not break the alignment with eIDAS

- We are following the update of eIDAS and will take this into consideration

The following Mandatory attributes are required by the Regulation.

Attribute (Friendly) Name	eIDAS MDS Attribute	ISA Core Vocab Equivalent	Notes
FamilyName	Current Family Name	cbc:FamilyName	Encoded as xsd:string
FirstName	Current First Names	cvb:GivenName	Encoded as xsd:string
DateOfBirth	Date of Birth	cvb:BirthDate	Encoded as xsd:date
PersonIdentifier	Unique Identifier	cva:Cvidentifier	Encoded as xsd:string

The following Optional attributes MAY be supplied by a MS if available and acceptable to national law.

Attribute (Friendly) Name	eIDAS MDS Attribute	ISA Core Vocab Equivalent	Notes
BirthName	First Names at Birth	cvb:BirthName	Encoded as xsd:string
BirthName	Family Name at Birth	cvb:BirthName	See above re birth names
PlaceOfBirth	Place of Birth	cva:BirthPlaceCvlocation	Encoded as xsd:string
CurrentAddress	Current Address	cva:Cvaddress	Encoded as multiple xsd:string elements
Gender	Gender	cvb:GenderCode	Encoded as xsd:string with a restriction of selection: Male, Female, Not Specified

Source.

Core Person: other GitHub issues

Proposition was agreed upon last webinar

Issue #3: To align Core Person with the Public Documents Schemas via adding alternative labels

Issue #12: To keep both the *countryOfBirth* and *placeOfBirth* properties

Issue #14: To have both issuingAuthorityURI (URI) and issuingAuthorityName (Text) for the Identifier

Issue #29: To add the scheme (dct:conformsTo) used to the Identifier class

Issue will be fixed in the new release

Issue #2: To set the domain of the properties in the distributions of the Core Vocs, where required/possible

Issue #4: To update the XML schemas in the Core Vocabularies package(s)

Issue #8: To fix Bach's first name: "Johann"

Issue #16: To explain the use of the Literal, Text and String data types and to use them consistently

Issue #18: To fix inconsistencies between data types in the XSD and the HTML specification

Core Person: your feedback

Do you have any other points you would like to discuss or raise?

4.3 Detailed overview of the changes for Core Location
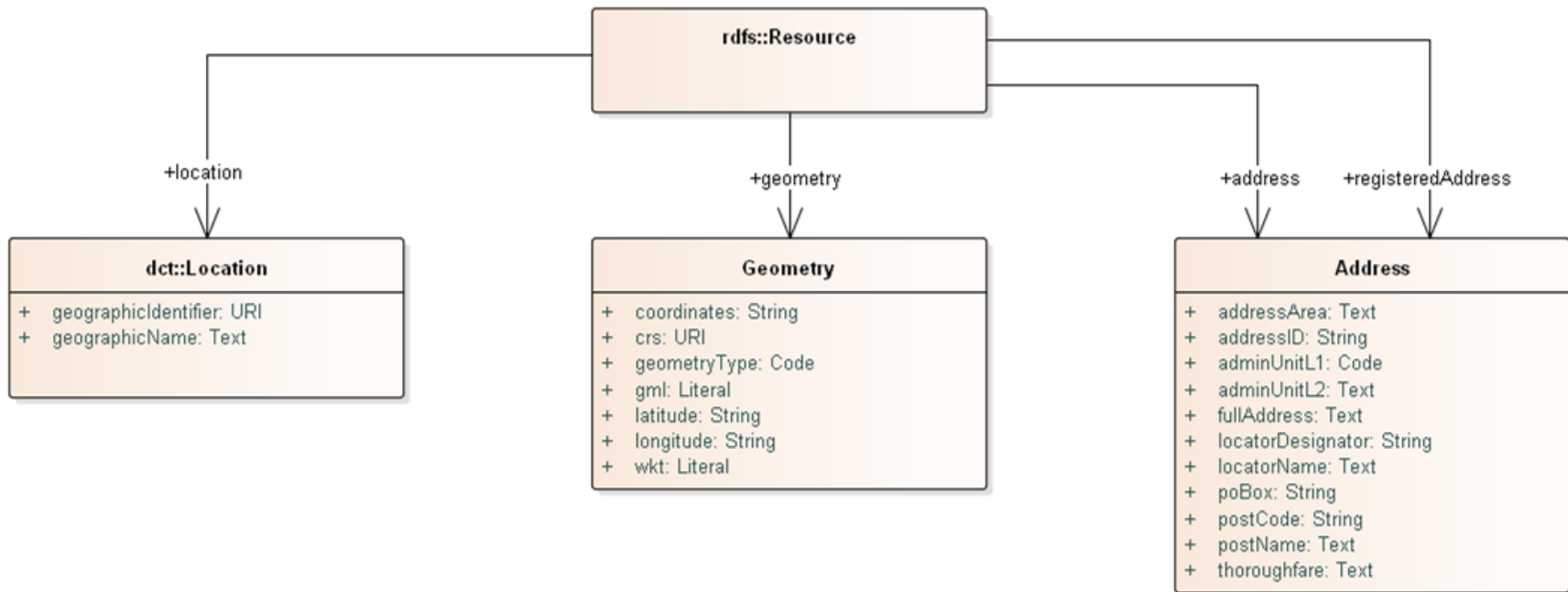
Expected action when the following logo appears

Let's discuss this idea

Let's agree / disagree

CORE
LOCATION
VOCABULARY

Core Location Vocabulary V2.0

Simplify structure of releases (Issue #1)

After the webinars have taken place, we will publish the final distributions of the Core Vocabularies and will take these comments into account in order to publish user-friendly releases.

Requirements identified after the first release of LOCN (Issue #2)

All requirements have been addressed in the context of GeoDCAT-AP release 2.

| Requirement	LOCADD	GeoDCAT-AP	SDW
Ability to specify bounding boxes	✓	✓	✓
Ability to specify centroids	✓		✓
Ability to specify spatial / temporal resolution	✓	✓	✓
Ability to specify spatial / temporal reference systems	✓	✓	✓
Availability of an XML / RDF datatype for GeoJSON		✓	✓
Ability to specify start / end date(time) for temporal coverage	✓	✓	✓

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Range of locn:geometry ([Issue #5](#))

- We make the Core Vocabulary more restrictive than W3C.
- Backwards compatibility is still achieved.

Previous version		
geometry	Literal, Geometry or URI	Associates any Resource with the corresponding geometry.

Proposed version		
geometry	Geometry	Associates any Resource with the corresponding geometry.
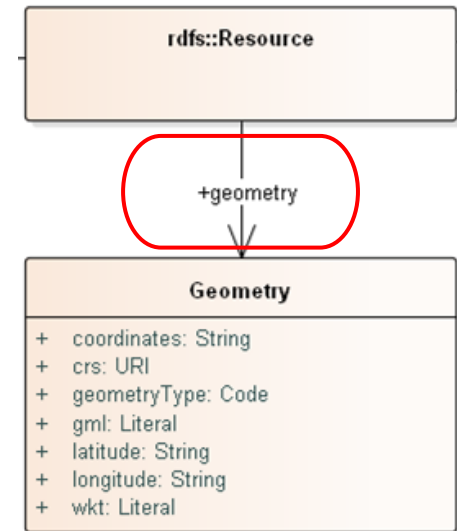
Proposition:

- To limit the range to the Geometry class.

  Do you agree with this proposition?

rdfs::Resource

+geometry

Geometry

+ coordinates: String
+ crs: URI
+ geometryType: Code
+ gml: Literal
+ latitude: String
+ longitude: String
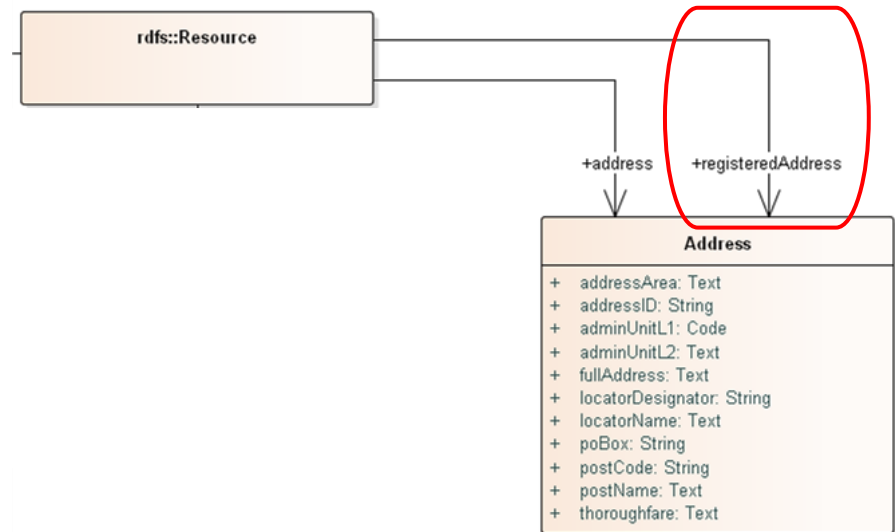+ wkt: Literal

European Commission

Address property and registeredAddress used in other EU core vocs (Issue #8)
Registered address (Issue #18)

Proposition:

- Include the registeredAddress subproperty within Core Location

Do you agree with this proposition?

PoliticalGeocodingURI needed not only adminUnitL2 (Issue #12)

Proposition:

- If simplicity is needed, use the Address class from Core Location

  or

- If you need a more structured representation, use INSPIRE

Do you agree with this proposition?

Is an Address a Spatial Object? (Issue #15)

Current definition in Core Location
A spatial object that in a human-readable way identifies a fixed location of a property.

INSPIRE's definition of Address
An identification of the fixed location of property by means of a structured composition of geographic names and identifiers.

INSPIRE's definition of Address Representation
Representation of an address spatial object for use in external application schemas that need to include the basic, address information in a readable way.

Proposition:

Representation of an address spatial object that in a human-readable way identifies a fixed location of a property.

Do you agree with this proposition?

European Commission

Core Location: other GitHub issues

Issue will be fixed in the new release

Issue #3: To fix a typo in the diagram: *locn:postCode*

Issue #4: To update the XML schemas in the Core Vocabularies package(s)

Issue was tackled in the previous part on Core Person

Issue #13: Representing the vocabulary in UML/HTML

Issue #14: Terminology and definitions in the Core Vocabularies

Issue #17: Administrative Unit: need for clarification

Core Location : your feedback

- Do you have other points to be discussed or raised ?

5. Wrap-up

Next steps

1. Core Person and Core Location

    Feedback can still be given until the **23rd of November** regarding:

    - https://github.com/SEMICeu/Core-Person-Vocabulary/issues
    - https://github.com/SEMICeu/Core-Location-Vocabulary/issues

1. Core Business and Core Public Organisation Vocabulary

    Deadline for responding on GitHub issues: **2nd of November**
    Webinar: **9th of November**
    Feedback after webinar: **23rd of November**

    - https://github.com/SEMICeu/Core-Business-Vocabulary/issues
    - https://github.com/SEMICeu/CPOV/issues

ISA² programme

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Programme

DIGIT-ISA2-
COMM@ec.europa.eu

Run by the Interoperability Unit at DIGIT (European Commission) with 131€M budget, the ISA² programme provides public administrations, businesses and citizens with specifications and standards, software and services to reduce administrative burdens.